

## SECTION-BY-SECTION EXPLANATION OF COMMITTEE PRINTS

### **Committee Print #1: Title I: Energy Efficiency (ENBILL\_004.XML)**

#### **Subtitle A: Appliance Efficiency**

*Section 101. Energy Standards for Home Appliances* - Adopts a consensus agreement developed by manufacturers and appliance efficiency advocates which sets new standards for residential clothes washers, dishwashers, and dehumidifiers, and mandates new standards for refrigerators, refrigerator-freezers, and freezers.

*Section 102. Electric Motor Efficiency Standards* - Adopts a consensus agreement developed by manufacturers and energy efficiency advocates which sets new standards for general and special purpose electric motors.

*Section 103. Residential Boilers* - Adopts a consensus agreement developed by manufacturers and energy efficiency advocates which sets new standards for residential boilers.

*Section 104. Regional Variation in Heating or Cooling Standards* – Authorizes the Department of Energy (DOE), if justified after a cost-benefit study involving stakeholders, to establish up to three regional variations in heating or air-conditioning appliance standards and requires appropriate labeling.

*Section 105. Procedure for Prescribing New or Amended Standards* - Repeals Section 325(p)(1) of the Energy Policy and Conservation Act (EPCA), which requires an advanced rulemaking process prior to a proposed rulemaking process.

*Section 106. Expediting Appliance Standard Rulemakings* - Allows the DOE to move expeditiously to a final rule when stakeholders submit a consensus position regarding new standards.

*Section 107. Correction of Large Air Conditioning Rule Issuance Constraint* - Corrects misinterpretation of the Energy Policy Act of 2005 (EPACT), which blocked implementation of final rules adopted by DOE on commercial package air-conditioning equipment.

*Section 108. Multiple Standards* - Clarifies DOE's authority to set multiple standards for products with multiple independent energy-using features.

*Section 109. Improving Schedule for Standards Updating and Clarifying State Authority*- Requires that DOE review standards after 6 years and propose new standards if warranted based on technical and economic factors, sets a 2-year deadline for finalization of new standards, and sunsets Federal preemption of State standards if DOE takes more than 2 years finalizing the standards. Where DOE determines new standards are not warranted, it must revisit that determination after three years, and States are no longer preempted if DOE fails to make a new determination.

*Section 110. Updating Appliance Test Procedures* - Requires review of all appliance test procedures every seven years.

*Section 111. Furnace Fan Standard Process* - Requires DOE to complete a furnace fan rulemaking by July 1, 2013.

*Section 112. Technical Corrections* - Makes technical corrections to related provisions of EPACT.

*Section 113. Energy Efficiency Standby Power Devices.* Requires Federal agencies to purchase devices that, to the extent available and practicable, use not more than 1 watt in the standby power mode.

#### **Subtitle B: Lighting Efficiency**

*Section 121. Efficient Light Bulbs* - Sets mandatory targets for future lighting efficiency.

*Section 122. Incandescent Reflector Lamps* - Adopts a consensus agreement on incandescent reflector lamp standards.

*Section 123. Use of Energy Efficient Lighting Fixtures and Bulbs* - Requires the Federal government to substitute energy-efficient lighting for incandescent bulbs wherever feasible.

#### **Subtitle C: Residential Building Efficiency**

*Section 131. Encouraging Stronger Building Codes* - Updates the State building energy efficiency codes that DOE requires State and local agencies to consider.

*Section 132. Energy Code Improvements Applicable to Manufactured Housing* - Requires manufactured housing to meet updated energy efficiency codes unless it is not cost effective to do so.

*Section 133. Baseline Building Designs* - Allow States to base energy budgets in building codes using energy efficiency standards greater than the Federal minimums.

*Section 134. Reauthorization of Weatherization Assistance Program* - Provides funding through 2012.

#### **Subtitle D: Commercial and Federal Building Efficiency**

*Section 141. Definitions* - Defines, among other terms, “high-performance green building,” “life-cycle” costs and assessments, and “zero-net-energy building.”

*Section 142. High-Performance Green Buildings* - Establishes an Office of High-Performance Green Buildings in DOE (within the Office of Energy Efficiency and Renewable Energy), appoints a Director, and assigns duties related to green building rating and analysis for Federal facilities, and coordination of green building activities

within the Federal government. Establishes a Green Building Advisory Committee of experts and stakeholders to advise and assist Federal green building efforts.

*Section 143. Zero-Net-Energy Commercial Buildings Goal* - Provides for review and adoption of a national goal to reduce commercial building energy use and achieve zero-net-energy commercial buildings so that such buildings are generally constructed after 2025, retrofitted to 50 percent of all commercial buildings by 2035, and all commercial buildings by 2050.

*Section 144. Public Outreach* - Provides for a public outreach effort to provide information on green buildings, including ratings, rating services, technical assistance and measurement tools.

*Section 145. Budget and Life-Cycle Costing and Contracting* - Requires the Director of the new office to develop and implement life-cycle budgeting and costing methodologies and tools for green buildings.

*Section 146. Incentives* - Requires the Director of the new office to identify and implement incentives through recognition awards and to allow agencies to retain savings achieved through green building practices.

*Section 147. Federal Procurement* - Requires the Director of the Office of Federal Procurement to modify procurement guidelines to employ green building materials and technologies and reduce environmental impacts.

*Section 148. Use of Energy and Water Efficiency Measures in Federal Buildings* - Requires Federal agencies to identify for each building the energy and water saving measures that could be undertaken (with 15-year-or-shorter paybacks), and within three years to implement and publicize such measures on the Internet and to develop a benchmarking system by which each agency's success will be scored. Requires use of highly energy efficient water heating equipment in Federal buildings.

*Section 149. Demonstration Project* - Requires five demonstration projects of green building technology at Federal facilities and four at universities in different regions of the U.S.

*Section 150. Energy Efficiency for Data Center Buildings* - Creates an Environmental Protection Agency (EPA) program to assist in achieving greater efficiency in buildings housing data centers and server farms.

*Section 151. Authorization of Appropriations* - Authorizes funding for the actions required by this subtitle.

### **Subtitle E: Industrial Energy**

*Section 161. Amends Energy Conservation and Policy Act (ECPA) to add three new sections:*

*(1) Survey of Waste Industrial Energy Recovery and Potential Use - Requires EPA to survey waste industrial energy recovery and potential use, and to create a registry of sites with economically feasible waste energy recovery.*

*(2) Incentives for Recovery, Utilization and Prevention of Industrial Waste Energy - Provides grants to support waste energy recovery and supports access to market for any excess power generated from waste energy.*

*(3) Clean Energy Application Centers - Strengthens and renames existing Combined Heat and Power (CHP) Application Centers to provide expert resources on energy efficiency, CHP, waste energy recovery, and energy-efficient materials usage, working directly with affected industries.*

### **Subtitle F: Energy Efficiency of Public Institutions**

*Sections 171-175. Energy Efficiency in Public Institutions - Promotes CHP and district energy systems in public institutions, and provides funding to help meet initial capital costs through Federal revolving fund loans.*

*Section 176. State Energy Program Reauthorization – Provides funding through 2012.*

### **Subtitle G: Energy Savings Performance Contracting**

*Section 181. Definition of Energy Savings - Revises definition to include renewable energy, cogeneration, and ability to sell power in Energy Savings Performance Contracts (ESPCs).*

*Section 182. Financing Flexibility. - Allows use of appropriated funds as necessary and appropriate in ESPCs along with contractor funds.*

*Section 183. Authority to Enter Contracts and Reports - Provides authority to enter contracts and replaces current Congressional notification requirement with an annual Federal Energy Management Program (FEMP) report detailing the termination penalty exposure of all current projects.*

*Section 184. Permanent reauthorization - Eliminates sunset provision of ESPC program authorization.*

*Section 185. Training Federal Contracting Officers to Negotiate Energy Efficiency Contracts - Orders the FEMP program in DOE to train contract officers from various Federal agencies in energy-efficiency contracting practices.*

*Section 186. Promoting Long-Term Energy Savings Performance Contracts and Verifying Savings* – Assures that ESPCs are not limited to less than 25 years and that the savings are measured and verified.

**Subtitle H: Advisory Committee on Energy Efficiency Financing**

*Section 191. Advisory Committee* – Creates Federal advisory committee to advise the Department of Energy on ways of increasing investments for commercial deployment of energy efficiency technologies.

**Committee Print #2: Smart Grid (ENBILL07\_007.XML)**

**Subtitle A: Smart Grid Facilitation**

*Section 101. Statement of Policy in Support of Modernization of Electricity Grid* - Establishes Federal policy to support implementation of Smart Grid technologies.

*Section 102. Grid Modernization Commission* – Establishes a Grid Modernization Commission (Commission) to lead the Federal effort to implement Smart Grid technologies and to work with States and utilities.

*Section 103. Grid Assessment and Report* - Instructs the Commission to study barriers to compatible Smart Grid technology implementation and to recommend means to assure development of consistent national protocols and model standards for Smart Grid technologies.

*Section 104. Federal Matching Fund for Smart Grid Investment Costs* - Creates Federal matching grant program to reimburse one-fourth of the costs of implementation of Smart Grid technologies where consumers, utilities, States or other participants contribute three-quarters of the costs.

*Section 105. Smart Grid Technology Deployment Program* - Instructs DOE to develop program to assist deployment of Smart Grid technologies and to perform cooperative demonstration projects with as many as five electric utilities.

*Section 106. Smart Grid Information Requirements* - Instructs the Commission to work with States, utilities and others to determine the information required by consumers to utilize Smart Grid technologies.

*Section 107. State Consideration of Incentives for Smart Grid* - Amends the Public Utility Regulatory Policies Act of 1978 (PURPA) to require States to consider regulatory standards that would (1) allow utilities to include Smart Grid investments in rates; (2) "decouple" utility profits from the volume of electricity throughput to consumers; and (3) require utilities to make time-sensitive supply, cost, price, and other information available to consumers to facilitate Smart Grid technologies and demand response.

*Section 108. DOE Study of Security Attributes of Smart Grid Systems* - Requires DOE to study the effects of Smart Grid technologies on the security of the electricity grid and infrastructure.

**Subtitle B: Demand Response**

*Section 111. Amends the National Energy Conservation Policy Act by adding three new sections:*

*(1) Federal Electricity Peak Demand Reduction Standard* - Requires Federal agencies to reduce their peak electricity consumption by 2 percent per year for a 10-year period, or make such demand available as demand response, and include results in reports to Congress.

*(2) National Action Plan for Demand Response* - Requires the Commission to conduct an assessment of demand response potential and to prepare a plan to achieve that potential through assistance to States.

*(3) Environmental Attributes and Impacts of Demand Response and Smart Grid Systems* - Requires an EPA Study of environmental effects of demand response and Smart Grid implementation.

**Committee Print #3: Amount of Loans Guaranteed (ENBILL07\_008.XML)**

*Section 101. Amount of Loans Guaranteed* - This section amends section 1702(c) of EPACT to (1) retain the existing statutory limit on DOE's authority to make a loan guarantee for an eligible project (up to 80 percent of the project cost of a facility), (2) clarify that DOE should approve an amount likely to attract nonguaranteed investment adequate to capitalize the project, (3) provide that while DOE has discretion to guarantee up to 100 percent of the loan amount (subject to the existing 80 percent of project cost cap), DOE may not issue a generic rule establishing a lower percentage limit, and (4) require that a recipient of a loan guarantee provide reasonable assurances that construction workers will be paid not less than prevailing wages consistent with the Davis-Bacon Act.

*Section 102. Exclusion of Categories* – Provides that no appropriation pursuant to this section may exclude any category of “eligible project” under Title XVII.

**Committee Print #4: Renewable Fuels Infrastructure (ENBILL07\_06B.XML)**

*Section 2. Renewable Fuels Infrastructure Development* - Requires DOE to establish a grant program to assist with the installation, replacement, or conversion of existing infrastructure to allow it to be used with renewable fuel, including E85. Also provides for technical assistance and marketing grants. Authorizes \$200 million annually to DOE for purposes of carrying out this section. Prohibits the awarding of any grant to a large, vertically integrated oil company.

*Section 3. Prohibition of Franchise Agreement Restrictions on Renewable Fuel Infrastructure* - Amends the Petroleum Marketing Practices Act (PMPA) to prohibit a franchise agreement from restricting the franchisee's ability to install renewable fuel infrastructure, convert existing infrastructure to renewable fuel use, advertise the availability of renewable fuel, or sell renewable fuel in any specified area of the marketing premises.

*Section 4. Renewable Fuel Dispenser Requirements* - DOE, in consultation with the Department of Transportation (DOT), shall report to Congress on the market penetration of FFVs and on the feasibility of requiring motor fuel retailers to install E85 compatible dispensers.

*Section 5. Pipeline Feasibility Study* - Requires DOE, in consultation with DOT, to conduct a study on the feasibility of the construction of dedicated ethanol pipelines.

*Section 6. Study of Ethanol-Blended Gasoline With Greater Levels of Ethanol* – Requires EPA, in consultation with DOE and DOT, to conduct a study of the feasibility of widespread use of ethanol blended gasoline with levels of ethanol greater than 10 percent.

*Section 7. Study of the Adequacy of Railroad Transportation of Domestically-Produced Renewable Fuel* – Requires DOE, in consultation with DOT, to study and report to Congress on the adequacy of railroad infrastructure for the delivery of ethanol.

*Section 8. Standard Specification for Biodiesel* - Requires EPA to promulgate regulations establishing uniform per gallon fuel standards for categories of biodiesel fuel so that engine manufacturers are able to design engines for biodiesel fuel that meets such standards.

*Section 9. Grants for Cellulosic Ethanol Production* - Amends EPACT to increase the authorized amount of cellulosic ethanol production grants and establish criteria to promote geographical dispersion of grant recipients and feedstock diversity.

*Section 10. Consumer Education Campaign Relating to Flexible-Fuel Vehicles* - Requires DOT, in consultation with DOE, to engage in a public education campaign to make consumers aware of the availability of flexible-fuel vehicles and the locations where renewable fuels can be purchased.

*Section 11. Domestic Manufacturing Conversion Grant Program* - Creates a grant program to support the domestic development and production of flexible-fuel vehicles.

*Section 12. Center of Excellence* – Authorizes a \$30 million DOE program to establish a Center of Excellence at North Carolina A&T State University which will distribute \$5 million of those funds to each of the following universities: South Carolina State University, Alcorn State University, Virginia State University, Tuskegee University, and the University of Arkansas at Pine Bluff.

**Committee Print #5: Advanced Battery and Plug-in Hybrid Programs (CP\_005.XML)**

*Section 1. Advanced Battery Loan Guarantee Program* - Creates a DOE advanced battery loan guarantee program for the development and production of next generation batteries in the United States.

*Section 2. Domestic Manufacturing Conversion Grant Program* - Creates a grant program to support the domestic development and production of plug-in hybrid technology vehicles.

*Section 3. Plug-in Hybrid Vehicle Program* – Establishes DOE grant program to encourage widespread utilization of plug-in hybrid vehicles and establishes an electric drive education program.

*Section 4. Incentive for Federal and State Fleets for Medium and Heavy Duty Hybrids* – Amends Section 301 of the EPACT to allow the purchase of medium or heavy duty hybrid vehicles to meet alternative fuel vehicle purchase requirements for fleets.

*Section 5. Inclusion of Electric Drive In EPACT* – Amends EPACT section 508 by allowing credits for various types of electric vehicles.

**Committee Print #6: Energy Information Enhancement (ENBILL07\_009.XML)**

*Sections 1 and 2. Energy Information Enhancement* - Improves State data collection required by the Energy Information Administration (EIA) to support efficient energy markets.